Biosecurity Awareness in Ireland
Is the Message Getting Through?

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INVAS Biosecurity

Biosecurity Workshop
Concarneau, France
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Scope

What is biosecurity?

What are we striving for in Ireland?

Biosecurity situation in Ireland

Recent progress
Biosecurity covers all activities aimed at managing and PREVENTING the introduction and spread of non-native and invasive species.

*Prevention is better than cure and far less environmentally, socially and economically expensive.*
What are we striving for in Ireland?

Comprehensive national Biosecurity Strategy that can identify and effectively tackle IAS risks to Ireland’s environment, economy and to human health

New Zealand is the Gold Standard

Three-tiered approach: pre-border - stop IAS getting in
border - stop IAS at point of entry
post-border - respond (EDRR) once in

Biosecurity Act (1993) – ensures nationally consistent, centrally coordinated biosecurity management

Strong, effective legislation and enforcement

Research supports biosecurity management and implementation - proactive IAS management is science-driven

Public support biosecurity - to protect farming, environment and public health from IAS
BIOSECURITY 2025
Protecting to Grow New Zealand

Discussion document on proposals for a Direction Statement for biosecurity in New Zealand

July 2016
Norway

Wild salmon angling is very big business and any threat will be severely dealt with.

Salmon fluke (*Gyrodactylus salaris*) causes catastrophic damage.

Control – nuclear option (Rotenone or derris powder)

Photos – Chris Horrill
Norway, Iceland .....  

Compulsory Disinfection of Angling Equipment

Laws prohibit import of equipment used abroad that is not disinfected

Disinfection should be carried out in the country of embarkation

Certificate of disinfection must accompany angling equipment

Certificate must be on official headed paper, stamped and no older than 3 weeks

Without a certificate, equipment must be disinfected at port of entry at owner’s expense or .......
GB Non-native Species Secretariat

Established in 2006 to meet challenges posed by IAS

‘GB Invasive Non-native Species Strategy’ published in 2008 (updated 2015) - to provide strategic framework for co-ordinated action against IAS

Small, permanent staff with monthly access to Minister

Advises government re IAS issues

Stakeholder engagement of primary importance

Supports and develops IAS campaigns (e.g. Be Plant Wise, Check Clean Dry)

 Produces IAS ID sheets, risk assessments, action plans

Excellent website www.nonnativespecies.org
What has been the Biosecurity Situation regarding IAS in Ireland?

No lead agency or Steering Group, with sole responsibility for IAS

No national Strategy for IAS

No biosecurity protocols (or even guidelines) for many Government agencies

No coordinated campaign(s) to promote IAS awareness

No funding / resource for Customs authorities to target IAS

Irish IAS legislation is not a deterrent

This is regrettable because, like NZ, Ireland is an island
Biosecurity for IAS in Ireland

Key Drivers

Increased rate of introduction and spread of IAS in last two decades

Recently, risk from pathogens has increased:

- Ash dieback (*Hymenoscyphus fraxinus*) - 2012
- Carp edema virus - 2018

- Salmon fluke (*Gyrodactylus salaris*)
- Koi Herpes Virus
Biosecurity Recommendations in Ireland

Identify the need to
- Check
- Clean
- Dry

But highlight the possible / likely need to **Disinfect**

- to minimise the risk of introducing or spreading pathogens
- to minimise spread of IAS when complete drying is not possible

Virkon Aquatic – broad-spectrum disinfectant, acknowledged to kill many fish pathogens and some IAS
Biosecurity for IAS in Ireland - Recent Progress

European Legislation

EU Regulation on “prevention and management of the introduction and spread of Invasive Alien Species” (No. 1143/2014)

Aim: to prevent, minimise and mitigate the adverse impacts of IAS on ..... 

2 recent IAS incursions have been targeted:

Coypu (*Myocastor coypus*)

Curly waterweed (*Lagarosiphon major*)

.... and emergency legislation dealing with Crayfish plague had been introduced
Biosecurity for IAS in Ireland - Recent Progress

Irish Legislation

SI 477: EC (Birds and Natural Habitats) Regulations 2011 (2 of 74 - IAS)

Reg 49: prohibits the introduction and dispersal of listed species

Reg 50: prohibits dealing with (sale, propagation, etc.) of listed species

…but Reg 50 not commenced because its not compatible with EU trade regulations

New legislation being written to revoke SI 477:

- aspects and species included in EU IAS Regulation
- cover EU trade regulations and replace Reg 50
- provide facility to rapidly introduce emergency legislation

To be finalised in 2019
Biosecurity for IAS in Ireland - Recent Progress

National Biodiversity Action Plan 2017 - 2021

Target 4.4 Control harmful IAS and stop introduction and spread

- implement EU IAS Regulations and relevant Irish legislation
- develop and adopt biosecurity plans in relevant state bodies
- develop a Rapid Response Protocol on the island of Ireland
- coordinate and collate IAS surveillance and monitoring data
- enhance measures to eradicate, control or contain IAS
- work with horticulture and pet trades to stop introduction and spread of IAS
Biosecurity for IAS in Ireland - Recent Progress

River Basin Management Plan (WFD) 2018 - 2021

Principal Actions (for DCHG)

- implement EU IAS Regulations
- put in place clear governance arrangements to manage aquatic IAS
- develop management plans for high impact IAS
- develop national guidelines for biosecurity

Enforcement ????
Biosecurity for IAS in Ireland - Recent Progress

Engagement with Government Minister and Regulatory Authority (NPWS)

Meeting with NPWS in late 2018

‘Long-awaited’ meeting with Minister (biodiversity ....) in February 2019

Within 2 weeks (small) national IAS budget doubled

Proposed List of Actions (18) for National Biosecurity Strategy submitted

- emphasis on need for nationally consistent and centrally coordinated management

To be considered and costed for possible phased entry

Follow-up meeting shortly
Biosecurity for IAS in Ireland - Recent Progress

Research

European projects  e.g. (Life CAISIE)
Interreg IVA N2K, Interreg IVA CANN
‘Improvement of Understanding and Communication’

National projects  e.g.  EPA Research – ‘prevention, control and eradication of IAS’

Collaboration:  develop novel, practical biosecurity measures to stop IAS spread
develop practical management solutions to stop spread
develop and trial new / safe disinfection products
improve effective communication / engagement with ......
Some examples of recent published Research


Cuthbert RN, Crane K, Dick JTA, **Caffrey JM**, MacIsaac HJ, Coughlan NE (2019) Die Hard: impact of **aquatic disinfectants** on the survival and viability of invasive *Elodea nuttallii*. *Aquatic Botany* 154, 11-17
Biosecurity for IAS in Ireland - Recent Progress

Targeted Protocol Development

Started with Inland Fisheries Ireland (IFI) pre-2015

Stakeholders e.g. anglers, boaters, scuba divers, paddle sports

Recent requests for dedicated biosecurity protocols and equipment:

Waterways Ireland
Irish Water
Local Authorities
Rivers Trusts
Community / volunteer groups

*Interest and uptake encouraging!!*
Biosecurity for IAS in Ireland - Recent Progress

Awareness promotion

Central to all research projects – major focus on social media

Media – national TV coverage occasional, with immediate high impact but....

Targeted IAS and Biosecurity Training (by INVAS)

Aim: - to provide information re IAS, impacts, pathways, legislation and ID
- stress the need for biosecurity, particularly in light of Crayfish plague
- introduce biosecurity protocols and demonstrate best biosecurity practice

In last 8 months, ran 26 full and half-day training / workshop sessions for State, semi-state, corporate, community and stakeholder groups
Biosecurity for IAS in Ireland - Recent Progress

Awareness promotion

Angling federation has introduced ‘no dip - no draw’ policy for all competitions

Canoeing Ireland promote cleaning and/or disinfection at all events
Biosecurity for IAS in Ireland - Recent Progress

National IAS Control Programmes

TII programme for Japanese Knotweed control on national roads – through Local Authorities

€5 million over four years (2016 – 2020)
Biosecurity for IAS in Ireland - Recent Progress

Cleaning/Disinfection Products for Individual, Club or Corporate Use
Biosecurity in Ireland

*Is the message getting through?*

- European and new national legislation will improve situation – though need enforcement

- Minister and NPWS fully aware and considering ‘List of Actions for National Biosecurity’

- Research, including awareness promotion, ongoing

- Dedicated biosecurity protocols developed for State and semi-state agencies

- Some stakeholder groups have developed biosecurity policy statements